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(54) High frequency generator with an automatic output control for high frequency surgery

The invention pertains to a high frequency generator with an automatic output control for high frequency surgery. The frequency of the high frequency generator is adjustable by electronic means and is raised by a control circuit to such a value, that the optimal phase relationship between the output voltage and output energy develops which results as a general rule in a phase shift of zero. The necessary signal for the control of the power output is yielded from the electric arc which has developed on the surgical probe. For this purpose a harmonic measuring device with a phase controlled rectifier which is controlled by the oscillator of the high frequency generator, is used. The advantage of the invention is that a simple filter can be used by the exit of the power amplification and that measuring filters in front of the harmonic measuring device can be either voided completely or just be constructed very elementary. A complicated filter alignment is not necessary. Nevertheless the power generator operates under optimal requirements and shows enhanced safety.